Figure 1

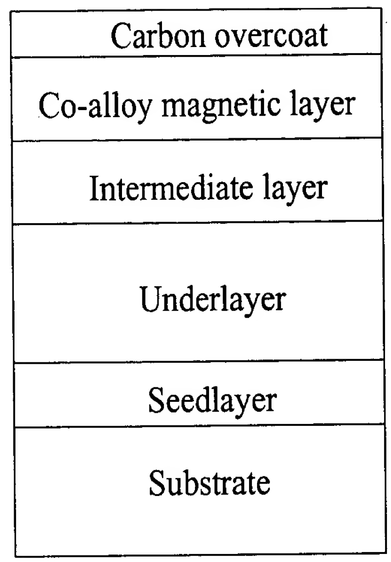
Carbon overcoat
Co-alloy magnetic layer
Intermediate layer
Underlayer
Seedlayer
Substrate

Figure 2

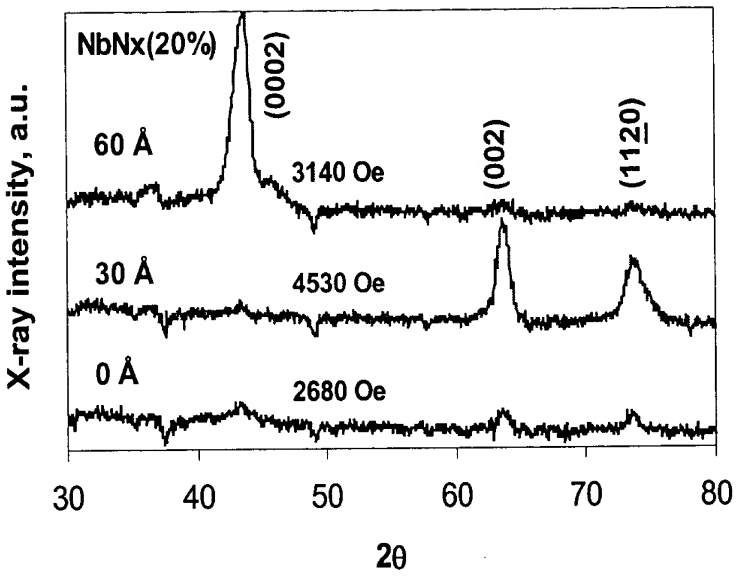

Figure 3

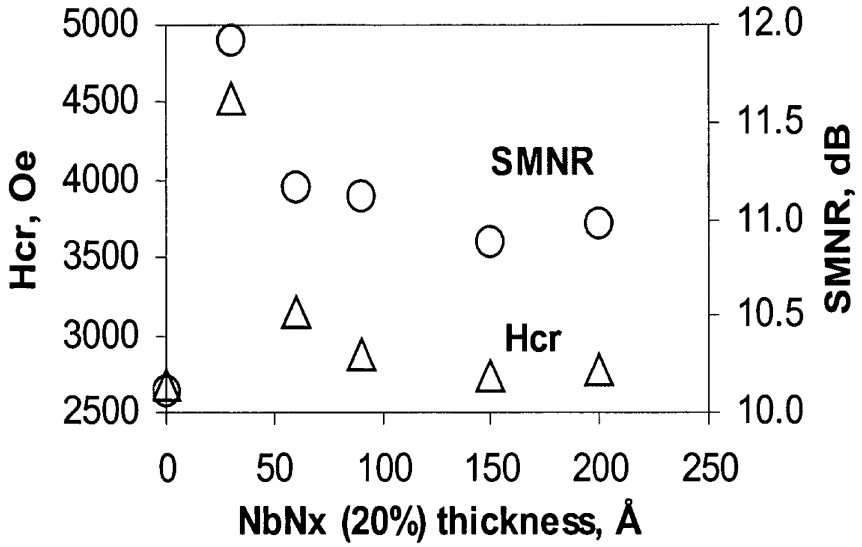
5000
4500
4000
3500
3000
2500
Hcr, Oe
12.0
11.5
11.0
10.5
10.0
SMNR, dB
SMNR
Hcr
0
50
100
150
200
250
NbNx (20%) thickness, Å

Figure 4

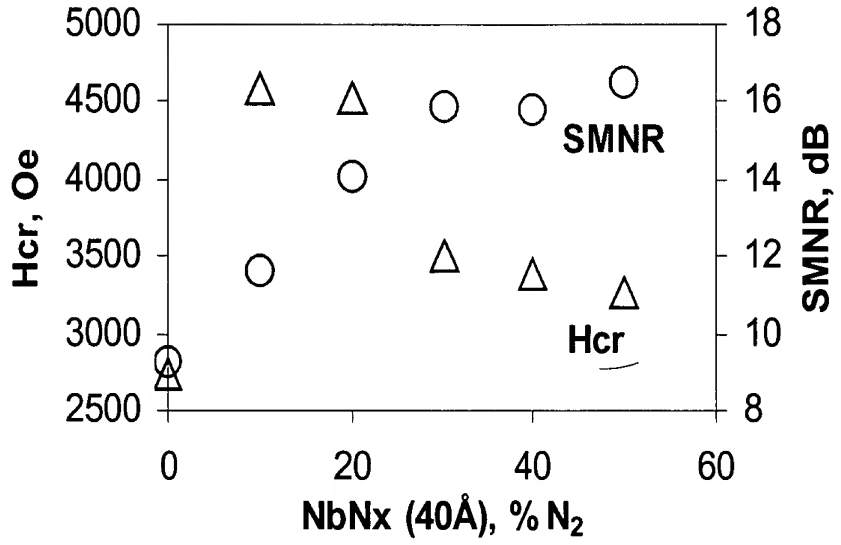

Figure 5

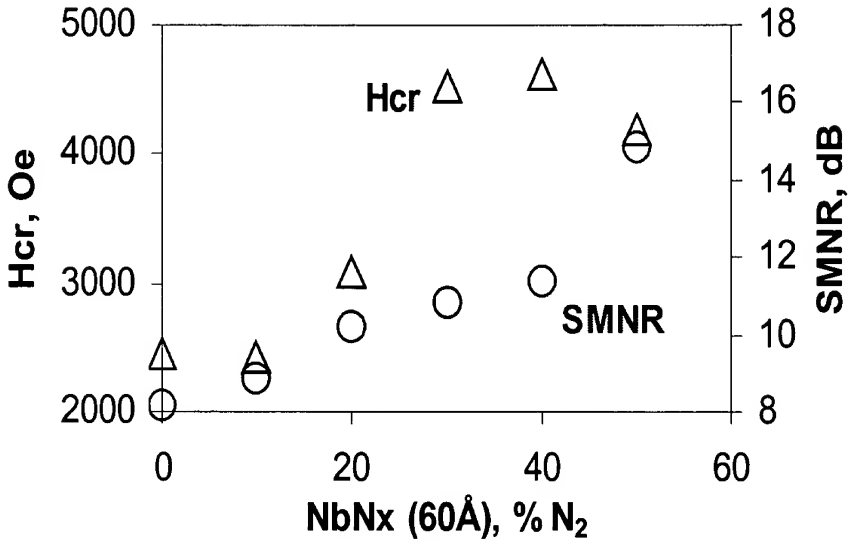
5000
4000
3000
2000
Hcr, Oe
18
16
14
12
10
8
SMNR, dB
Hcr
SMNR
0
20
40
60
NbNx (60Å), % N2

Figure 6